

REC'D 9/12/97
F.B.

Ciba

September 11, 1997

Mr. Frank Battaglia, Project Manager
USEPA Region I
Waste Management Building
90 Canal Street
Boston, MA 02114

RCRA RECORDS CENTER
FACILITY Ciba 62194 Corp
I.D. NO. RID001194323
FILE LOC. 12-5
OTHER _____

RE: Monthly Progress Report No. 86
Ciba Specialty Chemicals, 180 Mill Street, Cranston, RI 02905
EPA ID RID001194323

Dear Mr. Battaglia:

As required by the modified Consent Decree (CD) of September 28, 1992, I am submitting the monthly stabilization progress report for August 1997.

1.0 SUMMARY

Stabilization Plan (IRM)

- **Contaminated groundwater in the Production Area (AOC 13)** -- The groundwater extraction wells 110 and 120, as well as, the pretreatment system continued to operate with no problems. Since the initiation on September 29, 1995, the groundwater stabilization pretreatment plant has processed approximately 59.5 million gallons of contaminated groundwater meeting the permit wastewater discharge limits for the City of Cranston, Rhode Island.
- **Soil in the Production Area (SWMU 11)** -- The SVE was shut down on July 16, 1997, due to an odor problem from the unit that could not be immediately corrected. A sample of the catalyst was sent to Degussa (the manufacture) for evaluation. The result of the Degussa evaluation is included with this report..



2.0 DISCUSSION

The catalyst for the SVE unit was evaluated by Degussa. Coating by unknown organic material may be masking the active catalyst sites reducing the catalyst surface area by 26.8%. It is not known if the reduced activity is resulting in the odor problem, or if an unknown material is resulting in odors, as well as, coating the catalyst.

The catalyst problem may be corrected through the following:

1. Re-engineering part of the SVE unit and/or
2. Identifying the organic material and removing it from the influent.

The present plan of action is to identify a consultant with experience in SVE process and operations for a solution(s) to the problem.

3.0 SCHEDULE OF ACTIVITIES

- Correct the catalyst problem at the SVE unit
- Second semiannual compliance groundwater sampling to begin September or October, 1997

4.0 OTHER COMMENTS

If you have questions or need additional information, please contact me at 908 914-2737 or fax 908 914-2909.

Sincerely,



Barry Cohen
Alternate Projector Coordinator

Attachments: 1

Monthly Report Distribution List

Mr. Frank Battaglia (2 copies)

USEPA Region I

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(617) 573-9643

Mr. Tim Regan

RIDEM

Division of Site Remediation

235 Promenade Street, Providence, RI 02908-5025

(401) 277-2797 Ext. 7104

Mr. Mark Houlday w/o attachment

Woodward-Clyde Consultants

One Cranberry Hill, Lexington, MA 02173

(617) 863-0667

Field Sample Analysis

8-Sep-97

For: Ciba Geigy
Attn: Pat Sherry

Installation: Cranston

Catalyst: T2HDC
Manufacturer: Degussa

Type: Monolith

Poison Scan

Element	Concentration (g/ft3)	Element	Concentration (g/ft3)
Antimony	n/d	Phosphorus	4.84
Arsenic	n/d	Potassium	n/d
Calcium	n/d	Silicon	n/d
Chrome	n/d	Silver	n/d
Cobalt	n/d	Sodium	n/d
Copper	n/d	Sulfur	n/d
Iron	n/d	Tin	n/d
Lead	n/d	Tungsten	n/d
Manganese	n/d	Vanadium	n/d
Molybdenum	n/d	Zinc	3.24
Nickel	n/d		

Surface Area

Measured	20.5 m2/g
Reference	28 m2/g
Reduction	26.8 %

Conclusions

The poison scan did not reveal any significant levels of catalyst poisons. The BET surface area analysis shows a 26.8 % reduction in surface area.

It is suspected that the reduction in catalytic activity is caused by masking of the active catalyst sites by organic solids. It may be possible to restore the catalyst activity through thermal regeneration or washing of the catalyst.

Trichloroethylene Activity
Return Sample Ciba Geigy
Ref.-Nr. 3SEC060C

